## ANNEX NO. 2 BETWEEN

## THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION LANGLEY RESEARCH CENTER

AND

THE LONGBOW GROUP, LLC UNDER SPACE ACT UMBRELLA AGREEMENT SAA1-34272 FOR

# EVALUATION OF PROGNOSTIC SERVICES FOR AUTONOMOUS AIR VEHICLES IN URBAN ENVIRONMENTS

## ARTICLE 1. PURPOSE

The goal of this activity is to collaboratively test and evaluate prognostic services developed under NASA's System-Wide Safety project within the context of the Longbow Corporation's Unmanned Aircraft Systems (UAS) operations. Significant mutual benefit is expected through this collaboration. The Partner will utilize the capabilities of NASA developed prognostic services (e.g., Global Navigation Satellite System (GNSS) performance monitor, population density risk assessment, battery health monitor, etc.) within the context of UAS operations to increase situational awareness and decrease exposure to hazards. NASA in turn will receive valuable data from the Partner's operations and feedback on the services utility. This will allow NASA to better refine the prognostic services being developed. NASA software may be identified for release to Partner during this activity. All software releases will be subject to NASA's software release process and approval, and the execution by Partner of a separate software usage agreement.

The legal authority for this Annex, consistent with the Umbrella Agreement, is in accordance with the Space Act, Other Transactions Authority (OTA), 51 U.S.C. § 20113(e).

## ARTICLE 2. RESPONSIBILITIES

#### A. NASA LaRC will use reasonable efforts to:

- 1. Work with Partner to test and evaluate NASA software for use in Partner's operations.
- 2. Perform data analysis.
- 3. Document the effectiveness and suggested improvements of NASA software.
- 4. Release any NASA software to Partner, identified by NASA for release, in accordance with NASA's software release process and approval, under a separate software usage agreement executed by Partner. Prior to release of any NASA software, the software will be identified in the separate technical document referenced in paragraph 5.B.4 of this Annex.

- B. Partner will use reasonable efforts to:
- 1. Work with NASA to test and evaluate NASA software for use in Partner's operations.
- 2. Document the effectiveness and suggested improvements of NASA software.

## ARTICLE 3. SCHEDULE AND MILESTONES

The planned major milestones for the activities for this Annex defined in the "Responsibilities" Article are as follows:

NASA LaRC and Partner will collaborate to perform evaluation of NASA software using Partner's operational scenarios.

By September 30, 2024

NASA LaRC will perform data analysis.

By January 1, 2025

NASA LaRC and Partner will collaborate to document the effectiveness and suggested improvements of NASA software.

Thirty-six (36) months after the Effective Date

## ARTICLE 4. FINANCIAL OBLIGATIONS

There will be no transfer of funds between the Parties under this Agreement and each Party will fund its own participation. All activities under or pursuant to this Agreement are subject to the availability of funds, and no provision of this Agreement shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, (31 U.S.C. § 1341).

## ARTICLE 5. INTELLECTUAL PROPERTY RIGHTS - DATA RIGHTS

- A. Data produced under this Annex which is subject to paragraph C. of the Intellectual Property Rights Data Rights Article of the Umbrella Agreement will be protected for the period of one (1) year.
- B. Under paragraph H. of the Intellectual Property Rights Data Rights Article of the Umbrella Agreement, Disclosing Party provides the following Data to Receiving Party. The lists below may not be comprehensive, are subject to change, and do not supersede any restrictive notice on the Data provided.
- 1. Background Data: *The Disclosing Party's Background Data, if any, will be identified in a separate technical document.*
- 2. Third Party Proprietary Data: The Disclosing Party's Third Party Proprietary Data, if any, will be identified in a separate technical document.
- 3. Controlled Government Data: *The Disclosing Party's Controlled Government Data, if any, will be identified in a separate technical document.*
- 4. The following software and related Data will be provided to Partner under a separate Software Usage Agreement: *The software and related Data, if any, will be identified in a separate technical document.*

#### ARTICLE 6. TERM OF ANNEX

This Annex becomes effective upon the date of the last signature below ("Effective Date") and shall remain in effect until the completion of all obligations of both Parties hereto, or three (3) years from the Effective Date, whichever comes first, unless such term exceeds the duration of the Umbrella Agreement. The term of this Annex shall not exceed the term of the Umbrella Agreement. The Annex automatically expires upon the expiration of the Umbrella Agreement.

#### ARTICLE 7. RIGHT TO TERMINATE

Either Party may unilaterally terminate this Annex by providing thirty (30) calendar days written notice to the other Party.

#### ARTICLE 8. POINTS OF CONTACT

The following personnel are designated as the Points of Contact between the Parties in the performance of this Annex.

## **Technical Points of Contact**

NASA Langley Research Center The Longbow Group, LLC

Evan Dill Marco Sterk

Research Engineer CEO

Mail Stop: 234 Harbor Centre, Ste 1202

Langley Research Center 2 Eaton Street

Hampton, VA 23681 Hampton, VA 23669-4054 Phone: 757-864-9625 Phone: 901-336-6551

evan.t.dill@nasa.gov msterk@thelongbowgroup.com

#### **ARTICLE 9. MODIFICATIONS**

Any modification to this Annex shall be executed, in writing, and signed by an authorized representative of NASA and the Partner. Modification of an Annex does not modify the terms of the Umbrella Agreement.

[Remaining page intentionally left blank; signatures to follow on next page.]

## ARTICLE 10. SIGNATORY AUTHORITY

The signatories to this Annex covenant and warrant that they have authority to execute this Annex. By signing below, the undersigned agrees to the above terms and conditions.

THE LONGBOW GROUP, LLC

NATIONAL AERONAUTICS AND